



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,387	07/16/2003	Sandra L. Carr	P03049101	1386

27689 7590 12/09/2005

JOHN C. SMITH, ESQ.
2499 GLADES ROAD
SUITE 113
BOCA RATON, FL 33431

EXAMINER

PITARO, RYAN F

ART UNIT	PAPER NUMBER
----------	--------------

2174

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/604,387	Applicant(s) CARR ET AL.	
	Examiner Ryan F. Pitaro	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9,12-14,16-27 and 29-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,12-14,16-27 and 29-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7114103, 7123103,</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-2,4-9,12-14,16-27,29-59 have been examined.

Response to Amendment

2. This communication is responsive to Amendment B, filed 8/30/2005.
3. Claims 1-2,4-9,12-14,16-27,29-59 are pending in this application. In the Amendment B, Claims 3,15 were canceled, and claims 1-2,4-9,12-14,16-27,29-59 were amended. This action is made non-final.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1,2,4,8,13,14,16,21-23,25,29,30,49,52-56,58-59 are rejected under 35 U.S.C. 103(a) as being obvious over Ogden et al ("Ogden", US 5,870,842) in view of Maa ("Maa, US# 6,572,431).

As per independent claim 1, Ogden teaches a motion based multimedia I/O system for bidirectional communication of information between one or more computer applications and a user, further comprising: an I/O device, further comprising: at least one movable figure having a preselected ornamental appearance, a first universal adapter having a plurality of connections, and a plurality of movable components, the first universal adapter operatively connected to the

Art Unit: 2174

movable components such that the movable components independently move under control of the first universal adapter (Column 4 lines 4-15); a base unit having a second universal adapter having a plurality of connections for removable attaching to the first movable adapter in the movable figure (Column 4 lines 16-26); and the second universal adapter in the base unit having means to control the first universal adapter such that it can independently control movement of one or more preselected movable components in the movable figure (Column 4 lines 16-26); and the first universal adapter having connections associated with connections in the second universal adapter such that a movable figure can be interchanged with another and attached to the base unit (Column 4 lines 16-26, Column 22 lines 37-44); the base unit having means to initiate and control predetermined motions of a plurality of selected movable components under control of the second universal adapter in the base unit in response to instructions from a computer (Column 21 lines 54-67). Ogden fails to distinctly point out having software programs to control the movements of the figure or a speaker or microphone to communicate with the computer. However, Maa teaches the computer issued from one or more independent programs through a common interface, and the movements of the movable components having specific meaning for a user (Column 9 lines 11-65); a speaker, electrically attached to the movable figure, for outputting audio data from the computer (Figure 2 item 44; *speaker*); and a microphone electrically attached to the movable figure, for inputting voice data to the computer (Figure 2 item 46; *microphone*) whereby the motion based communications is made between one or more independent software programs in a computer and an individual (Column 9 lines 15-29). Therefore it would have been obvious to an artisan at the time of the invention to combine the

software driven device of Maa with the movable figure of Ogden. Motivation to do so would have been to provide synchronization of sound and actions of the movable figure.

As per claim 2, which is dependent on claim 1, Ogden-Maa discloses a system wherein the base unit communication with the computer via a wireless link (Maa, Column 3 lines 56-61).

As per claim 4, which is dependent on claim 1, Ogden-Maa discloses a system wherein base unit is remotely located from the computer (Maa, Column 3 lines 56-63).

As per claim 8, which is dependent on claim 1, Ogden-Maa discloses a system comprising means to select a voice from a voice data set and substitute the selected voice for the input voice data (Maa, Column 14 lines 62-67).

Claim 13 is similar in scope to that of claim 1, and is therefore rejected under similar rationale.

Claim 14 is similar in scope to that of claim 1, and is therefore rejected under similar rationale.

Claim 16 is similar in scope to that of claim 4, and is therefore rejected under similar rationale.

As per independent claim 21, Ogden-Maa discloses a multimedia I/O system for communicating information between a computer and a user (Column 8 lines 43-45), further comprising: a computer having a programmable processor and storage means for storing at least one computer programs, at least one computer program further having means to execute programming instructions to a base unit for controlling a movable figure (Maa, Column 9 lines 11-23); the base unit having at least one removably attached a movable figure (Ogden, Column 4 lines 16-26), the base unit further having a first universal adapter to attach to a corresponding

Art Unit: 2174

second universal adapter in the movable figure such that the first universal adapter controls movement of individual movable components of the movable figure (Ogden, Column 4 lines 4-15); a common interface between the programmable processor and the base unit having a predetermined interface format which allows multiple computer programs to independently access the base unit and control movement of the first universal adapter (Maa, Column 9 lines 11-23); whereby the multimedia I/O system acts as an intermediary communications device between one or more independent software programs and an individual that communicates information via movable figure motion (Maa, Column 9 lines 24-26).

As per claim 22, which is dependent on claim 21, Ogden-Maa discloses a system comprising: an interface for communicating between computer programs and the base unit, for receiving output audio data for output by the speaker, and for receiving instructions from the computer programs for controlling movement of the movable figure (Maa, Column 9 lines 24-28).

As per claim 23, which is dependent on claim 22, Ogden-Maa discloses a system comprising: a microphone for inputting audio data (Maa, Column 12 lines 20-23); means to transfer the input audio data to a computer program via the interface (Maa, Column 12 lines 20-23 and Column 12 lines 33-37); and the computer program having means to respond to the input audio data by outputting audio data and instructions to the base unit for controlling movement of the movable figure (Maa, Column 12 lines 20-23 and Column 12 lines 33-37); whereby the user can interact with a computer program by inputting audio data to the computer program, and receiving audio and motion output from the computer program (Maa, Column 12 lines 20-23 and Column 12 lines 33-37).

As per claim 25, which is dependent on claim 23, Ogden-Maa discloses a system comprising means to automatically output audio data and /or activate the base unit to move the movable figure when a pre-selected event is detected (Maa, Column 13 lines 4- 11; *predetermined*).

Claim 29 is similar in scope to that of claim 1 and therefore is rejected under similar rationale.

As per claim 30, which is dependent on claim 21, Ogden-Maa discloses a system further comprising: a manual input device, mainly a game controller, a joystick, a mouse, or a keyboard for inputting data to the computer for controlling the multimedia I/O device (Ogden, Column 21 lines 54-65).

As per independent claim 49, Ogden-Maa discloses a method of communicating between computers and individuals, including the steps of: using a base unit and a plurality of interchangeable moving figures (Ogden, Column 4 lines 4-26) to form a portable I/O device as an interface between a computer and an individual such that the computer can output information to the individual, and the individual can input data to the computer (Maa, Column 3 lines 47-53); using communication means in the base unit to communicate with the computer, and using a universal adapter that has a plurality of connections in the base unit to control independent movement of multiple movable components in the movable figure attached to the base unit (Ogden, Column 54-67); and providing a wireless link as the communication means between the computer and the portable I/O device such that the portable I/O device can be remotely located from the computer (Maa, Column 3 lines 57-61); whereby an individual can control and interact with the computer using a portable I/O device, and can move the portable I/O device from one

location to another while controlling and interacting with the remotely located computer (Maa, Column 3 lines 57-61).

As per claim 52, which is dependent on claim 1, Ogden-Maa fails to distinctly point out the common interface being an API software interface. However, Official Notice is taken that APIs are well known in the art. Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ogden-Maa with the current teaching. Motivation to do so would have been to provide a standard set of commands associated with particular multimedia I/O device, which will allow any application program to issue instructions to the multimedia I/O device.

Claims 53,54 are similar in scope to that of claim 51, and are therefore rejected under similar rationale.

As per claim 55, which is dependent on claim 1, Ogden-Maa discloses the software in a computer for controlling the base unit (Ogden, Column 4 lines 4-26) and the movable figure (Maa, Column 12 lines 20-23 and Column 12 lines 33-37); the base unit further comprises circuitry, having means to control motion of the movable figure in response to commands from the software, whereby the software can control the movable figure independent of direct control of the computer by issuing commands to the circuitry (Ogden, Column 21 lines 54-65).

As per claim 56, which is dependent on claim 21, Ogden-Maa discloses the software in a computer for controlling the base unit (Ogden, Column 4 lines 4-26) and the movable figure (Maa, Column 12 lines 20-23 and Column 12 lines 33-37); the base unit further comprises circuitry, having means to control motion of the movable figure in response to commands from

the software, whereby the software can control the movable figure independent of direct control of the computer by issuing commands to the circuitry (Ogden, Column 21 lines 54-65).

As per claim 58, which is dependent on claim 21, Ogden-Maa discloses a system further comprising a speaker for outputting audio data under control of the computer program (Maa, Figure 2 item 44).

As per claim 59, which is dependent on claim 1, Ogden-Maa discloses a system wherein the movable figure includes attachment means to attach to the universal adapter in the base unit the attachment means further having means to control individual components of the movable figure (Ogden, Column 22 lines 29-44); the base unit includes a universal adapter, which attaches to the attachment means on the movable figure and controls the movement of individual components of the movable figure via the attachment means (Ogden, Column 22 lines 29-44), the attachment means in the movable figure is removably attached to the universal adapter on the base unit such that the base unit can be attached to different movable figures (Ogden, Column 22 lines 29-44); whereby the base unit and the movable figures have mutually corresponding and detachable universal adapters which allow different movable figures to be interchangeably used in conjunction with a single base unit, and which multiple components inside of a movable figure are independently controlled and moved (Ogden, Column 22 lines 29-44).

6. Claims 5,6,24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Maa ("Maa, US# 6,572,431) in view of Liu ("Liu", US# US 6,800,013 B2).

As per claim 5, which is dependent on claim 4, Ogden-Maa fails to distinctly point out using a network. However, Liu teaches a system that communicates with the computer over a network (Column 2 lines 56-63). Therefore it would have been obvious to an artisan at the time of the invention to combine Ogden-Maa's system with the teaching of Liu. Motivation to do so would have been to allow for easy data transfer between network components.

As per claim 6, which is dependent on claim 5, the Ogden-Maa discloses a system wherein the base unit transmits voice data to a computer over a network (Liu, Column 3 lines 7-13).

As per claim 24, which is dependent on claim 23, the Ogden-Maa discloses a system comprising communication means in the computer to communicate with a network of computers (Liu, Column 2 lines 56-63), the communication means further having means to receive software instructions from remote computers for controlling the base unit motion and for activating the movable figure and for inputting and outputting data by the movable figure via the base unit (Liu, Column 3 lines 38-41).

7. Claims 7, 9, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Maa ("Maa, US# 6,572,431) and Liu ("Liu", US# US 6,800,013 B2) in view of Kikinis ("Kikinis", 5,746,602).

As per claim 7, which is dependent on claim 6, the Ogden-Maa fails to distinctly point out storing user voice data. However, Kikinis teaches a system comprising: means to store user voice data into the voice data set (Column 11 lines 39-43); and means to output the user's voice

data from the voice data set to the speaker (Column 11 lines 39-43); and means to transfer the user's voice data to a remote computer for output on a remote I/O device. Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ogden-Maa with the teaching of Kikinis. Motivation to do so would have been to make the figure more customizable.

As per claim 9, which is dependent on claim 8, Ogden-Maa fails to distinctly point out storing user voice data. However, Kikinis teaches a system comprising: means to store user voice data into the voice data set (Column 11 lines 39-43); and means to output the user's voice data from the voice data set to the speaker (Column 11 lines 39-43); and means to transfer the user's voice data to a remote computer for output on a remote I/O device. Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ogden-Maa with the teaching of Kikinis. Motivation to do so would have been to make the figure more customizable.

As per claim 51, which is dependent on claim 49, Ogden-Maa discloses using an I/O device which has a figure shaped to represent a character or object (Ogden, Column 4 lines 16-25); a base unit (Ogden, Column 4 lines 16-25), a microphone to input voice data to the integrated computer processor, the microphone electrically attached to either the figure or the base unit (Maa, Figure 2 item 46); a speaker to output audio data, the speaker electrically attached to either the figure or the base unit (Maa, Figure 2 item 44). Ogden-Maa further teaches instructions from the computer issued from one or more independent programs through a common interface (Maa, Column 4 lines 10-16) Ogden-Maa fails to disclose a removably attached base unit (Ogden, Column 4 lines 16-25), having an integrated computer processor, the processor having software, and communication using motion output. However, Kikinis teaches

Art Unit: 2174

means to store user voice data into the voice data set (Column 11 lines 39-43); and means to output the user's voice data from the voice data set to the speaker (Column 11 lines 39-43); and having an integrated computer processor, the integrated computer processor in the base unit further having software to control the movable components in the portable I/O device (Column 6 lines 24-33), the integrated computer processor further having software for synthesizing output audio data from digital data received from the computer or for outputting audio data received from the computer (Column 8 lines 52-59 and Figure 2 item 71); the integrated computer processor further having voice recognition software for converting input voice data to digital data for transmission via the wireless link to the computer (Column 8 lines 52-59 and Figure 2 item 71). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ogden-Maa with the teaching of Kikinis. Motivation would have been to give the figure more processing power making the figure more independent and flexible, and giving the computer more time to perform other tasks. Kikinis also teaches. Ogden-Maa also fails to distinctly point out communication through motion output, output audio data, and input voice data. However, Kikinis teaches a system whereby an individual can communicate with a computer using motion output data, output audio data and input voice data, and the processing overhead related to the conversion of input voice data to digital data and synthesis of output audio data is absorbed by the integrated computer processor and not by the computer (Column 8 lines 45-51). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ogden-Maa with the teaching of Kikinis. Motivation would have been to give the figure more processing power making the figure more independent and flexible, and giving the computer more time to perform other tasks.

8. Claims 12 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Maa ("Maa, US# 6,572,431) in view of Yeon ("Yeon", US2001/0027397 A1).

As per claim 12, which is dependent on claim 25, Ogden-Maa fails to distinctly point out the predetermined event being an alarm. However, Yeon teaches a system wherein the multimedia I/O device can be automatically activated by the computer to provide programmed alarms, predetermined events, and/or timed messages ([0022] lines 1-9). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ogden-Maa with the teaching of Yeon. Motivation to do so would have been to allow for the flexible communications of the figure to include events.

As per claim 26, which is dependent on claim 25, Ogden-Maa fails to distinctly point out the predetermined event being an alarm. However, Yeon teaches a system wherein the pre-selected event is an alarm ([0022] lines 1-9). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ogden-Maa with the teaching of Yeon. Motivation to do so would have been to allow for the flexible communications of the figure to include events.

Art Unit: 2174

9. Claims 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al (“Ogden”, US 5,870,842) and Maa (“Maa, US# 6,572,431) in view of Tong (“Tong”, US 5,636,994).

As per claim 32, which is dependent on claim 23, Ogden-Maa fails to distinctly point out communicating with different multiple devices. However, Tong teaches a system comprising means to input voice data to the microphone associated with the multimedia I/O device (Figure 6 item 63); and means to output the voice data to a speaker associated with a second multimedia I/O device on a remote computer (Figure 3 item 31, Column 4 lines 45-57). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ogden-Maa with the teaching of Tong. Motivation to do so would have been to allow for the flexibility of more than one figure.

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al (“Ogden”, US 5,870,842) and Maa (“Maa, US# 6,572,431) in view of McPhail (“McPhail”, “Buddy Bugs”).

As per claim 19, which is dependent on claim 13, Ogden-Maa fails to distinctly point out representing individuals in a chat room. However, McPhail teaches a multimedia device used to represent individuals in a chat room (Page 1 Abstract). Therefore it would have been obvious to combine the system of Ogden-Maa with the teaching of McPhail. Motivation to do so would have been to make the device more flexible by including it to represent individuals in a chat room.

11. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Maa ("Maa, US# 6,572,431) in view of Sega ("Sega", Time Traveler).

As per claim 33, which is dependent on claim 1, Ogden-Maa fails to disclose the use of a holographic image. However, Sega teaches a base unit having means to receive electronic data and convert it to holographic data, a holographic data input to holographic projection means for projecting a holographic image; and the movable figure is the holographic image (Page 2 Description). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Ogden-Maa with the teaching of Sega. Motivation to do so would have been to create a more appealing character for interaction.

12. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Maa ("Maa, US# 6,572,431) in view of Galyean III et al ("Galyean", US 6,290,565,B1).

As per claim 18, which is dependent on claim 13, Ogden-Maa fails to distinctly point out the multimedia device interacting with software games. However, Galyean teaches a system wherein the multimedia I/O device is used as a movable game figure in conjunction with software games. (Column 3 lines 10-15). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ogden-Maa with the teaching of Galyean.

Art Unit: 2174

Motivation to do so would have been to allow the user to appreciate the game more by allowing game interaction.

13. Claims 20 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Maa ("Maa, US# 6,572,431) and Galyean III et al ("Galyean", US 6,290,565,B1) in further view of Behrens ("Behrens", "We'll look back on this old Barney...").

As per claim 20, which is dependent on claim 18, Ogden-Maa-Galyean fails to disclose a device, which takes the place of a player in a game. However, Behrens teaches the movable multimedia I/O devices are used to represent individual players in multiplayer games (Page 2 Paragraph 6). Therefore it would have been obvious to combine the system of Ogden-Maa-Galyean with the teaching of Behrens. Motivation to do so would have been so that the user could play a multiplayer game if another party was not present.

As per claim 31, which is dependent on claim 18, Ogden-Maa-Galyean fails to distinctly point out a device, which determines if a specific instruction has taken place. However, Behrens teaches monitoring means to monitor user activity to determine if a specific instruction has been entered (Page 2 Paragraph 6) and means to automatically activate a predetermined response under control of the monitoring means if the specific instruction was entered (Page 2 Paragraph 6). Therefore it would have been obvious to combine the system of Ogden-Maa-Galyean with the teaching of Behrens. Motivation to do so would have been so that the user can interact with the device.

14. Claims 34-36 are rejected under 35 U.S.C. 102(b) as being unpatentable by Ogden et al ("Ogden", US 5,870,842) in view of Liu ("Liu", US# US 6,800,013 B2).

As per independent claim 34, Ogden discloses a base unit (Column 4 lines 4-25), and one or more movable figures that are interchangeably attachable to a universal adapter in the base unit, the universal adapter having means to initiate movement to independently control a plurality of movable components through the base unit (Column 4 lines 4-26, Column 22 lines 37-44). However, Ogden fails to teach associating a specific movement of the figure with an event in a software application. However, Liu discloses a method of using motion to communicate information between computers and individuals, including the steps of: using a plurality of independent software application to control an I/O device (Figure 3, Audio output software, Control software, speech recognition software), which has movable components, the software applications controlling the I/O device via a common interface having a predetermined interface format which allows the software applications to independently access the movable figure (Column 2 lines 34-48, through the common communications interface), for the purpose of conveying information via specific controlled movements of the I/O device, the movable I/O device is positioned in view of an individual such that the movements are visible to the individual (Column 3 lines 38-41); and associating specific events with specific movements such that when the individual observes a particular movement, information regarding a specific event is provided by the computer to the individual (Column 3 lines 38-41); whereby an individual can be notified of specific events by a plurality of software applications in the computer based on particular movements of the I/O device which are controlled by the computer (Column 3 lines

38-64). Therefore it would have been obvious to an artisan at the time of the invention to combine the event specific movements of Liu with the detachable figures of Ogden. Motivation to do so would have been to provide a more flexible and adaptable interactive device.

As per claim 35, which is dependent on claim 34, Ogden-Liu discloses a method including the steps of: using an I/O device which is structured to resemble a known character including humans, animals, cartoon characters, robots, or machines (Liu, Column 4 lines 1-2) and moving portions of the I/O device in a manner similar to the normal movement of the known character (Lui, Column 4 lines 14-15); whereby the behavior of the known character can be mimicked by the I/O device (Lui, Column 4 lines 14-15).

As per claim 36, which is dependent on claim 35, Liu discloses a method including the steps of: structuring the I/O device to resemble known characters (Lui, Column 4 lines 14-15); and moving the I/O device such that the movements of the I/O device resemble movements related to specific behavioral states (Lui, Column 4 lines 14-15).

15. Claims 37,38,39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Liu ("Liu", US 6,800,013 B2) in view of Kikinis ("Kikinis", 5,746,602).

As per claim 37, which is dependent on claim 36, Ogden-Liu fails to distinctly point out motions based on factors or specific events. However, Kikinis teaches a method of selecting the

Art Unit: 2174

motion used by the I/O device from a plurality of motions based on preselected factors (Column 10 lines 27-32); whereby the computer can alter the motions used for a particular specific event or expected input based on preselected factors (Column 10 lines 27-32). Therefore it would have been obvious to an artisan at the time of the invention to combine Ogden-Liu's method with the teaching of Kikinis. Motivation to do so would have been to allow for flexible responses causing the device to be more life like.

As per claim 38, which is dependent on claim 37, Ogden-Liu-Kikinis discloses a method including the steps of: providing audio output from the I/O device, under control of the computer, and coordinating motion data with audio data in a single communication (Liu, Column 2 lines 27-29); whereby the I/O device more closely resembles the known character represented by the I/O device (Liu, Column 4 lines 14-15).

As per claim 39, which is dependent on claim 38, Ogden-Liu-Kikinis discloses a method including the steps of: using a microphone to input audio data from the individual to the computer (Lui, Column 3 lines 8-9); using voice recognition software in the computer to analyze the audio data input by the individual and respond to instructions or data contained in the audio data (Lui, Column 3 lines 16-21); whereby the individual can issue commands, or enter data, to the computer via the microphone (Lui, Column 3 lines 8-9).

16. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over ("Ogden", US 5,870,842) and Liu ("Liu", US 6,800,013 B2) and Kikinis ("Kikinis", 5,746,602) in view of Galyean III et al ("Galyean", US 6,290,565,B1).

As per claim 45, which is dependent on claim 39, Ogden-Liu-Kikinis fails to distinctly point out playing a game where the character is the device. However Galyean teaches a method including the steps of playing a game on a computer (Column 3 lines 26-27), and using the I/O device to represent a character from the game (Column 5 lines 62-67), whereby the I/O device can communicate directly with the individual for the character in the game (Column 5 lines 62-67). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Ogden-Liu-Kikinis with the teaching of Galyean. Motivation to do so would have been to allow the user to appreciate the game more by allowing game interaction.

17. Claims 48, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Liu ("Liu", US 6,800,013 B2) in view of Galyean III et al ("Galyean", US 6,290,565, B1).

As per claim 57, which is dependent on claim 35, Ogden-Liu fails to distinctly point out playing a game where the character is the device. However Galyean teaches a method including the steps of playing a game on a computer (Column 3 lines 26-27), and using the I/O device to represent a character from the game (Column 5 lines 62-67), whereby the I/O device can communicate directly with the individual for the character in the game (Column 5 lines 62-67). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Ogden-Liu with the teaching of Galyean. Motivation to do so would have been to allow the user to appreciate the game more by allowing game interaction.

As per claim 48, which is dependent on claim 35, Ogden-Liu fails to distinctly point out the I/O device representing a character from a game. However Galyean teaches a method including playing a game on a computer (Column 3 lines 26-27); and using the I/O device to represent a character from the game (Column 5 lines 62-67); whereby the I/O device can communicate directly with the individual for the character in the game (Column 5 lines 62-67). Therefore it would have been obvious to an artisan at the time of the invention to combine the method of Ogden-Liu with the teaching of Galyean. Motivation to do so would have been to allow the user to appreciate the game more by allowing game interaction.

18. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Liu ("Liu", US 6,800,013 B2) and Kikinis ("Kikinis", 5,74 6,602) in further view of Maa ("Maa", US# 6,572,431).

As per claim 40, which is dependent on claim 39, Ogden-Liu-Kikinis fail to distinctly point out carrying the device from one location to another and remain in communication. However, Maa teaches a method including the additional step of: remotely locating the movable I/O device in a remote location from the computer, to allow remote communication between a computer and an individual (Column 3 lines 56-61); and using a wireless connection between the I/O device and the computer such that the user can move the I/O device from one location to another and remain in communication with the computer (Column 3 lines 56-61); whereby the individual can carry the movable I/O device from one location to another and remain in communication with the computer (Column 3 lines 56-61). Therefore it would have been obvious to an artisan at the time of the invention to combine system of Ogden-Liu-Kikinis with

Art Unit: 2174

the teaching of Maa. Motivation to do so would be so that the device was not limited to the immediate computing area.

19. Claims 41-44, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Liu ("Liu", US 6,800,013 B2) and Kikinis ("Kikinis", 5,746,602) and of Maa ("Maa", US# 6,572,431) in further view of Tong ("Tong", US 5,636,994).

As per claim 41, which is dependent on claim 40, Ogden-Liu-Kikinis-Maa fail to distinctly point out multiple devices in remote locations. However Tong teaches a method, including the step of: using a plurality of movable I/O devices, each associated with an individual, located in remote locations from the computer and portable such that each individual can carry the individual's respective I/O device from one location to another to allow remote communication between multiple individuals via the computer (Column 3 lines 35-50). Therefore it would have been obvious to an artisan at the time of the invention to combine Ogden-Liu-Kikinis-Maa with the teaching of Tong. Motivation to do so would have been to allow for more than one portable device encouraging the user to purchase more than one device for different purposes.

As per claim 42, which is dependent on claim 41, Ogden-Liu-Kikinis-Maa discloses a method including the additional steps of storing, in an audio data library, a plurality of selectable unique audio data, including voice data (Maa, Column 14 lines 62-67 and Column 15 lines 1-9); and selecting and outputting portions of the unique audio data (Maa, Column 15 lines 3-5); whereby the unique audio data is output by the I/O device (Maa, Column 14 lines 62-65).

As per claim 43, which is dependent on claim 42, Ogden-Liu-Kikinis-Maa discloses a method including the additional step of: storing voice data from the individual in the audio library, and selecting and outputting portions of the voice data to the I/O device (Kikinis, Column 11 lines 39-43); whereby the individual's voice is output from the I/O device (Kikinis, Column 11 lines 39-43).

As per claim 44, which is dependent on claim 39, Ogden-Liu-Kikinis-Maa discloses a method including step of: using a plurality of movable I/O devices, located in remote locations from the computer, to allow remote communication between a computer and a plurality of individuals (Tong, Column 3 lines 35-50).

As per claim 46, which is dependent 46, Ogden-Liu-Kikinis-Maa discloses a method including the steps of: attaching a computer to a network of computers having at least one remote computer (Liu, Column 2 lines 10-12); attaching multiple I/O devices to the computer and having at least one of the I/O devices represent an individual on the remote computer (Liu, Column 2 lines 56-62); and controlling, via the remote computer, the motion and audio output of the I/O device that represents the individual using the remote computer (Liu, Column 3 lines 37-41); whereby multiple remote users can have individual I/O devices on the computer which allows them to produce motion data on the local computer(Tong, Column 3 lines 35-50).

20. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Liu ("Liu", US 6,800,013 B2) and Kikinis ("Kikinis", 5,746,602) in view of Yeon ("Yeon", US 2001/0027397 A1).

As per claim 47, which is dependent on claim 39, Ogden-Liu-Kikinis discloses a method of attaching a computer to a network of computers having at least one remote computer (Lui, Column 2 lines 10-12); attaching multiple I/O devices to the computer, and having at least one of the I/O devices represent a remote computer (Lui, Column 2 lines 56-62). Ogden-Lui-Kikinis fails to distinctly point out outputting data that represents system events. However, Yeon teaches outputting motion data from the remote computer to the I/O device via the network that represents system events on the remote computer ([0022] lines 1-9). Therefore it would have been obvious to an artisan at the time of the invention to combine Ogden-Liu-Kikinis method with the teaching of Yeon. Motivation to do so would have been to make the device more flexible by allowing it to communicate system events.

21. Claims 27,50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Maa ("Maa", US# 6,572,431) in view of Kaminsky ("Kaminsky", "SweetPea: Software Tools for Programmable Embodied Agents).

As per claim 27, which is dependent on claim 23, Ogden-Maa discloses a system comprising voice data collection and storage means to store a variety of voice data types from a variety of sources (Maa, Column 14 lines 62-67). Ogden-Maa fails to distinctly point out means to select the voice data through the interface. However Kaminsky teaches means to select voice data stored in the voice data collection and storage means by entering voice commands into the microphone, and outputting the selected voice data via the speaker (Page 5 Counting; *wherein*

Art Unit: 2174

the prior art teaches using the dolls motion and/or speech to signify a keystroke in the computer to select or traverse). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ogden-Maa with the teaching of Kaminsky. Motivation to do so would have been to ease interactions for end users by providing identifiable output behaviors and input interactions.

As per claim 50, which is dependent on claim 49, Ogden-Maa fails to distinctly disclose using motion to output notification of specific events. However, Kaminsky teaches using movable components in the portable I/O device, which are controlled by the computer, to convey information output from the computer to an individual via specific controlled movements of the portable I/O device that are visible to the individual (Page 5 Notification); and associating specific events with specific movements such that when the individual observes a particular movement, information regarding a specific event is provided by the computer to the individual (Page 5 indicating values); whereby the individual can be notified of specific events by the computer based on particular movements of the portable I/O device which are controlled by the computer (Page 5 notification). Therefore it would have been obvious to an artisan at the time of the invention to combine the system of Ogden-Maa with the teaching of Kaminsky. Motivation to do so would have been to ease interactions for end users by providing identifiable output behaviors and input interactions.

22. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogden et al ("Ogden", US 5,870,842) and Maa ("Maa", US# 6,572,431) and ("Liu", US 6,800,013 B2) in further view of Yeon ("Yeon", US 2001/0027397 A1).

As per claim 17, which is dependent on claim 13, Ogden-Maa-Lui fails to disclose the notification of system events. However, Yeon teaches the multimedia I/O device outputs notification of system events, including e-mail, incoming user messages, system status messages, and scheduled messages ([0022] lines 1-4; *state of the computer*). Therefore it would have been obvious to an artisan at the time of the invention to combine the modified system of Ogden-Maa-Lui with the teaching of Yeon. Motivation to do so would have been to allow for the flexible communications of the figure to include events.

Response to Arguments

Applicant's arguments with respect to claims 1-2,4-9,12-14,16-27,29-59 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan F. Pitaro whose telephone number is 571-272-4071. The examiner can normally be reached on 7:00AM-4:30PM, Monday through Thursday and alternating Fridays.

Art Unit: 2174

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on 571-272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan F. Pitaro
Patent Examiner
Art Unit 2174

RFP


KRISTINE KINCAID
SUPERVISORY PATENT
TECHNOLOGY CENTER